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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,340	12/15/2003	Ronald S. Cok	87286AJA	3716

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EXAMINER	
LUU, THANH X	

ART UNIT	PAPER NUMBER
2878	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/736,340	COK, RONALD S.	
	Examiner	Art Unit	
	Thanh X. Luu	2878	

pw

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/2004; 06/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Riedel (U.S. Patent 6,150,124).

Regarding claims 1 and 2, Riedel discloses (see Fig. 4 and col. 5, lines 30-45) a circuit for detecting light comprising: a light-integrating photosensor circuit (18) having one or more thin-film photosensors and being responsive to a variable integration period signal and to ambient light for producing a photo signal representing the intensity of the ambient light, wherein the photo signal may be in one of at least three states including a no-signal state (low ambient light), an in-range state and a saturated state (high ambient light); and a control circuit (microprocessor, not shown) for receiving the photo signal and automatically increasing the period of integration period signal when the photo signal is in the no-signal state and decreasing the period of the integration period signal when the photo signal is in the saturated state so as to result in the photo signal being

in the in-range state and producing a corresponding ambient light signal. Riedel further discloses (see col. 2, line 51) a photodiode.

4. Claims 1, 2, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Bechtel et al. (U.S. Patent 6,402,328).

Regarding claims 1, 2, 4 and 6, Bechtel et al. disclose (see Fig. 3 and col. 8, lines 41-67) a circuit for detecting light comprising: a light-integrating photosensor circuit having one or more thin-film photosensors (48; see Fig. 2) and being responsive to a variable integration period signal and to ambient light for producing a photo signal representing the intensity of the ambient light, wherein the photo signal may be in one of at least three states including a no-signal state (low ambient light), an in-range state and a saturated state (high ambient light); and a control circuit (not shown) for receiving the photo signal and automatically increasing the period of integration period signal when the photo signal is in the no-signal state and decreasing the period of the integration period signal when the photo signal is in the saturated state so as to result in the photo signal being in the in-range state and producing a corresponding ambient light signal. Bechtel et al. further disclose (see col. 3, line 20) a photodiode or a phototransistor. In addition, Bechtel et al. disclose (see col. 11, line 17) a silicon photosensor.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riedel.

Regarding claims 3-6, Riedel discloses the claimed invention as set forth above. Riedel does not specifically disclose the type of photosensors as claimed. However, photocapacitors, phototransistors, organic photosensors and silicon photosensors are notoriously well known and choosing a particular photosensor requires only routine skill in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide one of the claimed photosensors in the apparatus of Riedel to conveniently and cost effectively obtain ambient light detection.

Regarding claims 7-10, Riedel discloses the claimed invention as set forth above. Riedel does not specifically disclose if the signals are in analog or digital form. However, analog and digital signals are well known. Furthermore, choosing to represent a signal in digital or analog form requires only routine skill in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide either analog or digital signals in the apparatus of Riedel (for digital) to obtain a signal that is more resilient to noise or more compatible with modern digital processors, or (for analog) obtain a more cost effective and less complex device.

Regarding claim 11, Riedel discloses the claimed invention as set forth above. Riedel does not specifically disclose a plurality of photosensor circuits. However, choosing to add another photosensor circuit requires only routine skill in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention

was made to provide another photosensor circuit in the apparatus of Riedel to obtain additional detection for redundancy or error-checking purposes.

7. Claims 3, 5 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bechtel et al.

Regarding claims 3 and 5, Bechtel et al. disclose the claimed invention as set forth above. Bechtel et al. do not specifically disclose the type of photosensors as claimed. However, photocapacitors, phototransistors, organic photosensors and silicon photosensors are notoriously well known and choosing a particular photosensor requires only routine skill in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide one of the claimed photosensors in the apparatus of Bechtel et al. to conveniently and cost effectively obtain ambient light detection.

Regarding claims 7-10, Bechtel et al. disclose the claimed invention as set forth above. Bechtel et al. do not specifically disclose if the signals are in analog or digital form. However, analog and digital signals are well known. Furthermore, choosing to represent a signal in digital or analog form requires only routine skill in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide either analog or digital signals in the apparatus of Bechtel et al. (for digital) to obtain a signal that is more resilient to noise or more compatible with modern digital processors, or (for analog) obtain a more cost effective and less complex device.

Regarding claim 11, Bechtel et al. disclose the claimed invention as set forth above. Bechtel et al. do not specifically disclose a plurality of photosensor circuits.

However, choosing to add another photosensor circuit requires only routine skill in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide another photosensor circuit in the apparatus of Bechtel et al. to obtain ambient light detection at different locations for improved light control.

8. Claims 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese publication of Toshiba (JP 2002-297096) in view of Bechtel et al.

Regarding claims 12-16 and 18, Toshiba discloses (see Figs.) a flat-panel display and method, comprising: a substrate and a plurality of light-emitting elements (organic ELs) located in a display area; and an ambient light detector and adjusting the brightness of the display in response to the ambient light signal. Toshiba does not specifically disclose an ambient light detector having a variable integration period as claimed. Bechtel et al. teach (see Fig. 3) operating an ambient light detector with a variable integration period as claimed in order to increase the sensitivity or the dynamic range of the detector. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a variable integration period ambient light detector in the apparatus of Toshiba in view of Bechtel et al. to improve detection by increasing the dynamic range of the detector as taught.

Regarding claim 17, Toshiba in view of Bechtel et al. disclose the claimed invention as set forth above. Toshiba and Bechtel et al. do not specifically disclose a plurality of photosensor circuits. However, choosing to add another photosensor circuit requires only routine skill in the art. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide another photosensor circuit

in the apparatus of Toshiba in view of Bechtel et al. to obtain ambient light detection at different locations for improved display control.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is 571-272-2441. The examiner can normally be reached on M-F 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thanh X Luu
Primary Examiner
Art Unit 2878

09/2005